

## ABSTRACT

An apparatus for producing seedlings, wherein rootstocks and scions are nursed on multi-staged seedling culture shelves installed in a closed-type structure surrounded by light-interceptive walls, and wherein the rootstocks and scions are joined to each other to produce grafted seedlings. The grafted seedlings are placed on shelf boards of the seedling culture shelves and covered with a light-transmitting shield including vent holes, and light is projected onto the grafted seedlings through the light-transmitting shield to weld the seedlings. The relative humidity in the light-transmitting shield immediately after the grafting is raised by the evaporation of moisture from the rootstocks and the scions. When photosynthesis is stimulated, gas exchange between the carbon dioxide gas-containing atmosphere within the closed type structure and the atmosphere within the light-transmitting shield are accomplished to replenish an inner space of the light-transmitting shield with carbon dioxide gas.